

# Work Order ID 64613

Thursday, December 09, 2010 10:21:13 AM

Page 1

Item ID: D206-642-151 *LEFT HAND GA* Accept

Revision ID:

Item Name: Replacement Skidtube

Start Date: 12/9/2010 Start Qty: 1.00

Required Date: 1/14/2011 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: *CL* Date: *11/05/06* Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start  
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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100



DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile & type labels per PPP D206-642-151

0.00

0.00

CHG001

*N/A*

*Left Hand*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Setup Start



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Stop



Item Name: Replacement Skidtube

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Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110



Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Deburr Fwd edge of tube

2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804

3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Qty ☐ Part Number ☐ Description ☐ BatchA/R ☐Aluminum Rod ☐

4-Grind weld flush to cap on top surface only.

5-Cut Aft end as per dwg D3804 from front of tube and Deburr

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804

7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.

8-Drill pilot holes using Dt-8167.

9-Locate DT8732 from inner Aft saddle hole &amp; 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 &amp; D206-642-241-T1, then locating doubler off of 3/16" holes, cfeco DT8732 &amp; doubler leaving DT8732 for added support.

10- Drill D3286-1 doubler rivet holes in tube using # 40 drill, spot drilling doubler at the same time.

&gt; AD 11-5-6

M111385/M116577 BE 11/05/09  
BE 11/05/09

BE 11/05/09

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QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
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Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D3804

15-C'sink GHW rivet holes as per Dwg D3804

*16- open AFT cap hole, deburr blow out chips*

120



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

*Silverico*

*70*

*BEN/05/09*

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Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



Skidtubes

Skidtubes

Skidtubes

Memo

1-Open crossbolt holes to Ø0.3125"

2- Open Aft cap hole #6.

\*\*\*\*no wearplate holes for this skidtube\*\*\*\*

3-Deburr tube and blow out chips from inside the tube

0.00

0.00

0.00

0.00

0.00

0.00

140



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

150



QC

Quality Control

QC3- Inspect Part Finish

Memo

N/A

11-5-10

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QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

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160		0.00							
	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open holes to finished size as per Dwg D3804, (without cutting fluid)								
	2-C'sink crossbolt spacer holes as per Dwg D3804(without cutting fluid)								
	3-Deburr and blow out all chips from inside the tube								
170		0.00							
	QC6- Inspect dimensions to drawing								
QC	Memo	0.00							
Quality Control									

11.05.10

11-5-10

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180

0.00



Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required

2-Bond ~~D2654~~ web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: ☒ 11-5-17 ☐ Time: ☒ 1045 ☐

Finish Date: ☒ 11-5-17 ☐ Time: ☒ 4:35am

Pick:

Qty ☐ Part Number ☐ Description ☐ Batch

A/R ☐ Sikaflex-291 ☒ 116948 ☐

Sikaflex expire date: ☒ 12-1-15

11.05.10



11-5-17

190

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

8/10/18

70

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-remove alodine from around hole and prepare for welding

BE 11/05/10

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

Qty ☐ Part Number ☐ Description ☐ Batch

A/R ☐ Aluminum Rod ☐

mm385

BE 11/05/10

3-Grind welds flush as per Dwg D3804.

DD 11-5-19

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/R ☐ SS Rod ☐

NONE

BE 11/05/10

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D3804. Deburr

BE 11/05/10

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Start Date: 12/9/2010 Start Qty: 1.00



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QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210



HandFinish

HandFinishing

0.00

Memo

0.00

Hand Finishing

Install D2680-041 Nut Plate as per Dwg D3804

1

B  
11/05/27

220



QC

Quality Control

~~QC9~~ Inspect visual per QSI004- Fusion Welds

QC10

Memo

0.00

0.00

8/10/05/27

Pto →

230



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8/10/05/27

WIO: 64613		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
11/5/27	#270	Perm. change to QC10 inspection					8 11/5/27	

Part No: D206-642451 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Item ID: D206-642-151 Accept  Setup Start   
Revision ID: Stop   
Item Name: Replacement Skidtube  
Start Date: 12/9/2010 Start Qty: 1.00  Cust Item ID:  
Required Date: 1/14/2011 Req'd Qty: 1.00  Customer:

## Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start   
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240  HandFinish Hand Finishing	Pressure Wash per QSI005 4.3  Memo	0.00  0.00				1X	0	M-11/05/30	
250  Powdercoat Powder Coating N116964	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum  Memo START TIME: 11:15 OVEN TEMPERATURE: 320 OF FINISH TIME: 11:45	0.00  0.00				1X	0	M-11/05/30	
260  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				1	0	M-11/06/00	

W/O:		WORK ORDER CHANGES					
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Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

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Tool ID

Tool #

Plan  
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QtyReject  
QtyReject  
NumberInsp.  
Stamp

270



HandFinish

Hand Finishing

HandFinishing

Memo

0.00

0.00

1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install  
plugs as per Dwg D3804. Clean excess adhesive.

1 0 34 1/06/01

280



HandFinish

Hand Finishing

HandFinishing

Memo

0.00

0.00

1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive

A/R ☐ Sikaflex-291 ☐ 1116945✓ Sikaflex expire date: 12/01

2- Install wearplate as per dwg

2-Wing Walk as per Dwg D3804 and QSI 005 4.4

Batch: 1117315

1 0 34 1/06/01

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QtyReject  
QtyReject  
NumberInsp.  
Stamp

290

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

300

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

310

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D206-642-151

Location:

PPP Rev:

B 64617

P41/6/02 C

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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QtyReject  
NumberInsp.  
Stamp

320

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/6/2010

MK  
11-08-01

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries



# Picklist Print

Friday, May 06, 2011 10:49:31 AM

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Work Order ID: 64613

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube



Start Date: 12/9/2010

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 10.12.08 PER IIN REV:N DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2620

Manufactured

No

Each

13.0000

1



Skidtube, 206 Skidtube

Location

Loc Qty

Loc Code

LG

13

62684

3

68135

10

D3286-1

Manufactured

No

Each

40.0000



Doubler

Location

Loc Qty

Loc Code

LG002

40

52844

19

64563

21

D2647

Manufactured

No

Each

38.0000

1



Cap

Location

Loc Qty

Loc Code

LG002

38

55352

38

CR3212-4-04

Purchased

No

Each

559.0000

52



Cherry Rivet

Location

Loc Qty

Loc Code

ST311

559

115698

159

116471

400

11-5-6  
BEU/05/09

BEU/05/09

11.05.10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Friday, May 06, 2011 10:49:31 AM

Work Order ID: 64613

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/9/2010

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D2654-1

Manufactured No

*B64781*

Each

6.0000



Web



*1*

*11-5-17*

Location

Loc Qty

Loc Code

LG

6

64781

6

Each

211.0000

19

D2649

Manufactured No



Cross Bolt Spacer



*BE 11/05/18*

Location

Loc Qty

Loc Code

LG

85

68224

85

LG001

126

65317

1

68507

125

*19*

D3286-3

Manufactured No



Spacer



2

*BE 11/05/24*

Location

Loc Qty

Loc Code

LG002

39

46643

7

64564

32

*2*

CCR264SS3-3

Purchased No



Cherry Rivet



2

Location

Loc Qty

Loc Code

FP-B

2

113973

2

ST311

137

113973

2

117086

135

*2*

*BB*

*11/05/27*

Friday, May 06, 2011 10:49:31 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 3

Friday, May 06, 2011 10:49:31 AM

Work Order ID: 64613

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/9/2010

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased No

Each 1,254.000

2



Cherry Rivet

Location Loc Qty Loc Code

FP-B 16

110139 16

ST311 1238

114859 1238

2

BB 11/05/27

D2680-041

Manufactured No

Each 19.0000

1



Nut Plate

Location Loc Qty Loc Code

ST020 19

55366 70088 19

Each 0.0000

1

BB 11/05/27

D3805-041

Manufactured No



Wearplate Assembly Fwd, Low Gear

D3805-045

Manufactured No

Each 0.0000

1



Wearplate Assembly Aft, Low Gear

AN3-37A

Purchased No

Each 299.0000

7



Bolt

Location Loc Qty Loc Code

ST353 249

105425 113

111668 136

ST354 50

117619 50

x7

Friday, May 06, 2011 10:49:32 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Friday, May 06, 2011 10:49:32 AM

Work Order ID: 64613

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/9/2010

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

AN960JD10 NAS1149D0363J Purchased No

Each 0.0000

7



M1116583



(x7) JH 11/06/10

Washer

MS21042L3 Purchased No

Each 2,410.000

7



JH 11/06/10

Nut

## Location

## Loc Qty

## Loc Code

ST300

2410

116391

11

116540

433

116549

766

117441

800

117601

400

x7

D3873-1 Manufactured No

Each 123.0000

14



JH 11/06/10

Bushing

## Location

## Loc Qty

## Loc Code

ST088

123

62197

12

63314

2

64567

9

64760

100

x14

AN960JD416 NAS1149D0463J Purchased No

Each 0.0000

1



B61962



(x1) JH 11/06/10

Washer

M117291

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Friday, May 06, 2011 10:49:32 AM

Page 5

Work Order ID: 64613

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/9/2010

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D2651-1 Manufactured No

Each 294.0000

6



Plug



all u/06/01

Location

Loc Qty

Loc Code

fpa

121

69018

121

FP-A

173

57869

7

66445

10

67263

34

67760

122

x6

D2651-3 Manufactured No

Each 600.0000

6



O-Ring



all u/06/01

Location

Loc Qty

Loc Code

FP-A

600

61962

156

66956

444

x6

MS27039-4-06 Purchased No

Each 65.0000

1



Screw



all u/06/01

Location

Loc Qty

Loc Code

FP-A

30

115460

30

ST292

35

115460

35

x1

Friday, May 06, 2011 10:49:32 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 6

Friday, May 06, 2011 10:49:32 AM

Work Order ID: 64613

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/9/2010

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D2646 Manufactured No

Each 47.0000

1



Aft Cap

*Handwritten: 26 46106*

Location

Loc Qty

Loc Code

FP006

43

62678

43

FP-4

4

69019

4

*x1*

MS27039-1-08

Purchased

No

Each

1,046.000

2



Screw

*Handwritten: 26 46106*

Location

Loc Qty

Loc Code

FP-A

107

110835

107

ST291

939

115108

639

117423

300

*x2*

AN960JD10L

NAS1149D03321

Purchased

No

Each

0.0000

2



Washer

*Handwritten: M117246*

*Handwritten: (x2) 26 46106*

Friday, May 06, 2011 10:49:33 AM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM	Qty -041	Qty -043	Part Number	Description
1	X		D3804-041	SKIDTUBE ASSEMBLY, 206 A/B LOW
2		X	D3804-043	SKIDTUBE ASSEMBLY, 206 A/B HIGH
5	1	1	D2600-1-160	EXTRUSION
6	1	1	D2646	AFT CAP
7	1	1	D2647	CAP
8	19	20	D2649	CROSS BOLT SPACER
9	6	8	D2651-1	PLUG
10	6	8	D2651-3	O-RING
11		1	D2654-3	WEB
12	1		D2654-1	WEB
13	1	1	D2680-041	NUT PLATE
14	2	2	D3286-1	DOUBLER
15	2	2	D3286-3	STUD
21	2	2	AN960JD10L	WASHER
22	1	1	AN960JD416	WASHER
23	2	2	CCR264SS3-3	RIVET
24	2	2	CR3212-4-03	RIVET
25	52	52	CR3212-4-04	RIVET
26	2	2	MS27039-1-08	SCREW
27	1	1	MS27039-4-06	SCREW

#### NOTES

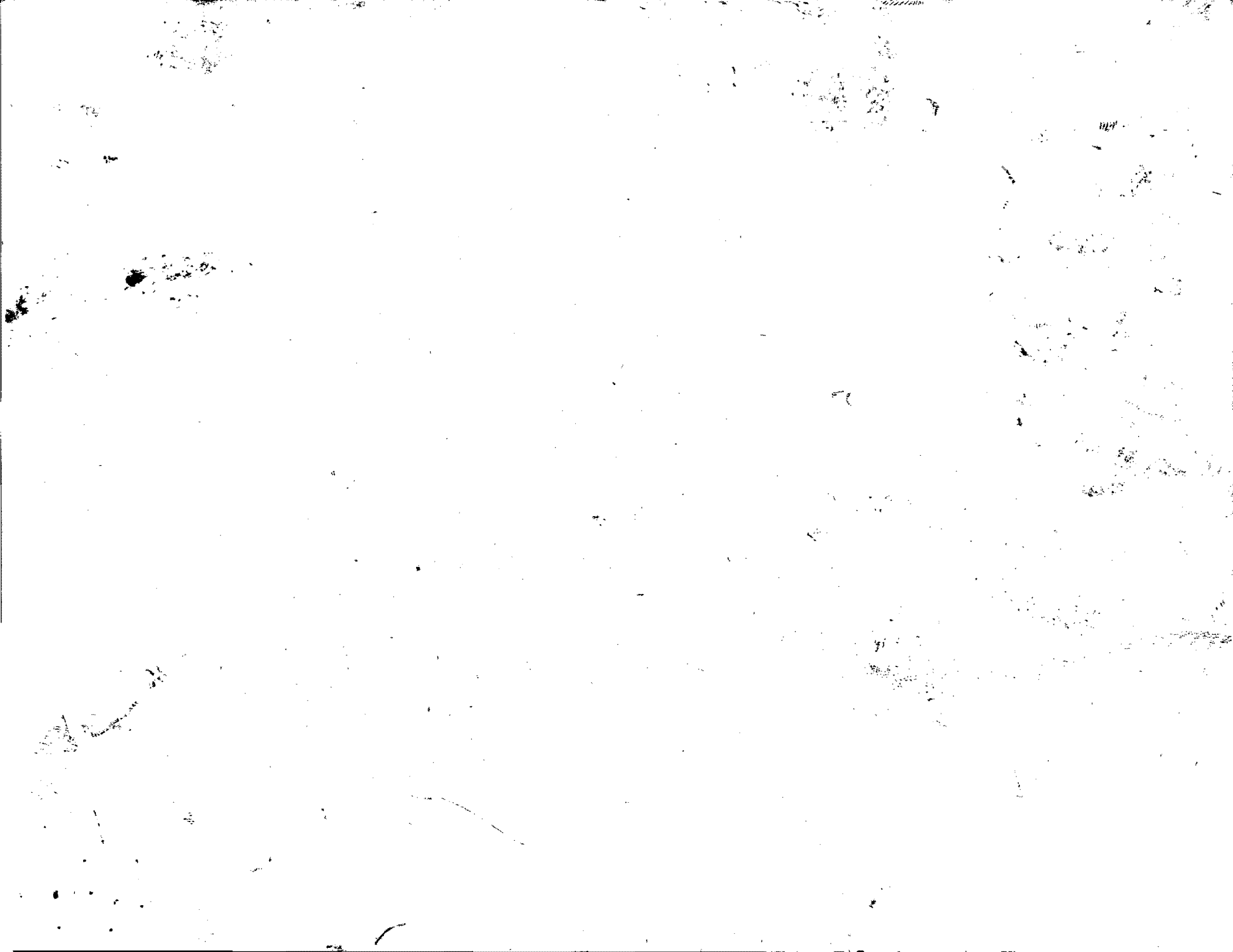
- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG CW D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 04613

*010-12-14*

**RELEASED**  
*09.03.03*  
per ECN 09-530

A	NEW ISSUE	MB	08.07.07
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>97</i>	<b>DART AEROSPACE USA, INC</b>	
DRAWN	<i>97</i>	PORT HADLOCK, WA	
CHECKED	<i>97</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>97</i>	D3804	SHEET 1 OF 5
APPROVED	<i>97</i>	TITLE	SCALE
DE APPR.	<i>97</i>	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	









u/o u443

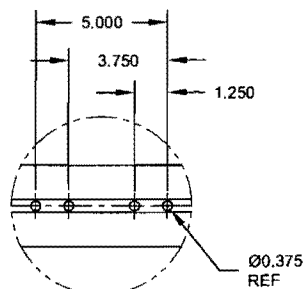


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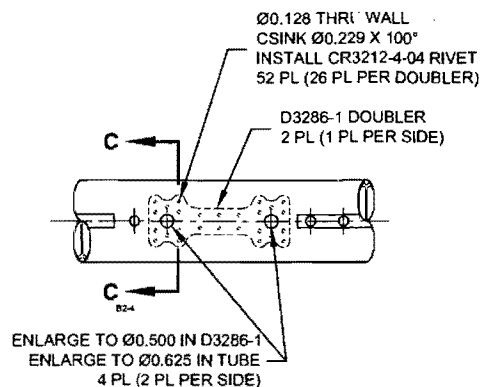


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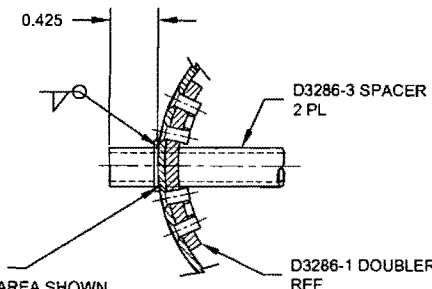
RELEASED  
UP 09.03.03



**DETAIL A** D6-2  
C2-2  
D6-3  
C2-3  
SCALE NONE

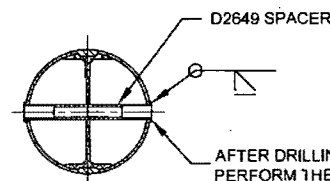


**DETAIL B** C3-2  
C3-3  
SCALE NONE



- TO INSTALL D3286-1/-3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
  2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
  3. ENLARGE HOLES IN D3286-1 TO Ø0.500
  4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
  5. RIVET D3286-1 TO TUBE
  6. INSERT D3286-3 SPACER
  7. WELD IN PLACE AND GRIND FLUSH

**SECTION C-C** C6-4  
PARTIAL SECTION  
SCALE NONE



**SECTION D-D** A4-2  
A4-3  
FOR Ø0.375 HOLES ONLY  
SCALE NONE

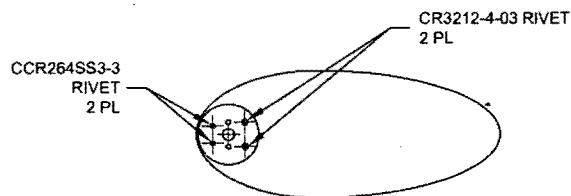
*w/o 44613*

DESIGN	<i>9</i>	<b>DART AEROSPACE USA, INC</b>	
DRAWN	<i>9</i>	PORT HADLOCK, WA	
CHECKED	<i>9</i>	DRAWING NO. D3804	REV. A
MFG. APPR.	<i>9</i>		SHEET 4 OF 5
APPROVED	<i>9</i>	TITLE	SCALE
DE APPR.	<i>9</i>	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

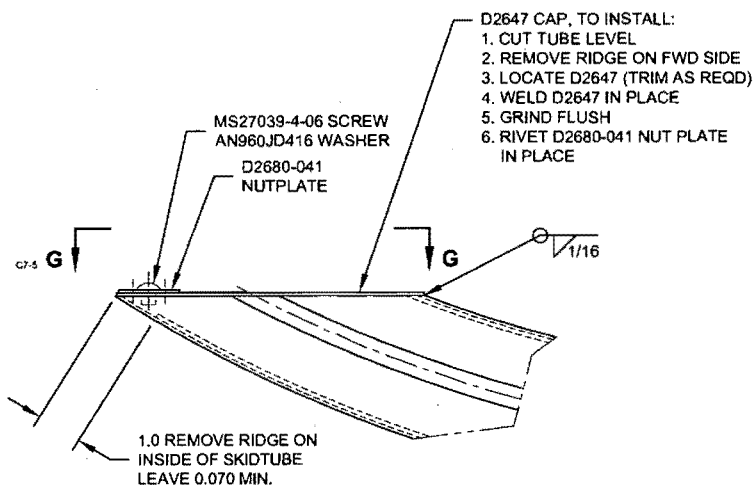
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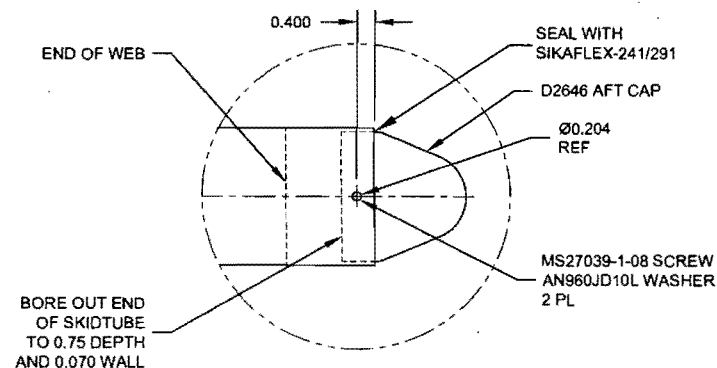
RELEASED  
07 09 03 03



**VIEW G-G**  
SCALE NONE A7-3



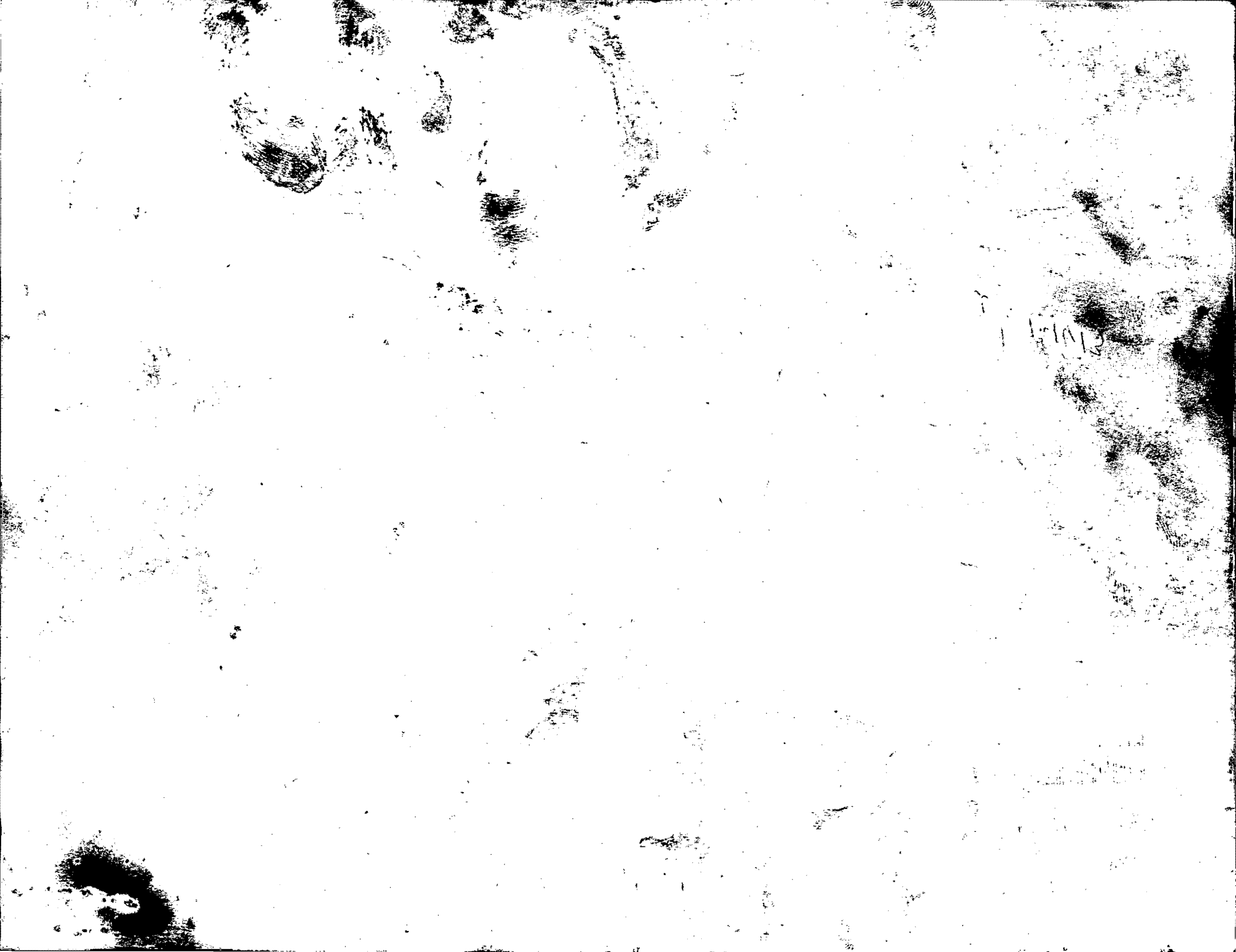
**DETAIL E**  
SCALE NONE B7-2 B7-3



**DETAIL F**  
SCALE NONE B2-2 B2-3

u/o 64413

DESIGN	97	<b>DART AEROSPACE USA, INC</b>	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	97	D3804	SHEET 5 OF 5
APPROVED	97	TITLE	SCALE
DE APPR.	97	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	<small>COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	



NO: 252

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 66358  
Part number: D206 642 541  
Description: 206  
Welding Process: Tig ☒ Mig ☐  
Base material: Aluminum  
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual: pass ☒ fail ☐  
Penetration: pass ☒ fail ☐

UNACCEPTABLE

Cracks: pass ☒ fail ☐  
Undercut: pass ☒ fail ☐  
Pin holes: pass ☒ fail ☐  
Overlap (cold lap): pass ☒ fail ☐  
Porosity (surface): pass ☒ fail ☐  
Coloration: pass ☒ fail ☐

Qualifier Pat King Date of Test Coupon 11-05-09

Welder Barclay Elliott Date of Test Coupon 11-05-09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

